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6 December 1955

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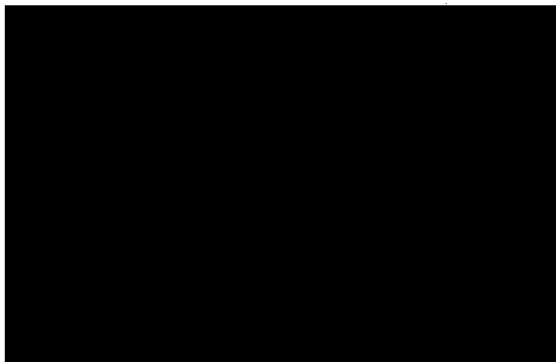
MEMORANDUM FOR THE RECORD:

SUBJECT: Procurement of Replacement for the HF-4 Transmitter

1. In forecasting requirements for additional HF-4 transmitters for stock, issue, replacement, and stock pile needs, it was determined that some 165 transmitters should be procured. Before proceeding with the procurement of this rather large quantity of transmitters, it was decided that a very careful look would be taken at the field of available transmitters which might fit our requirements since the HF-4 transmitter, while the workhorse of World War II, nevertheless was rapidly becoming obsolete insofar as present day techniques were concerned. For example, it should be possible to produce a transmitter of similar or higher power in the same space that the HF-4 occupies and incorporate additional desirable features such as a stable VFO and complete internal band switching. If such a transmitter were not found (as turned out to be the case) then it was planned to investigate the possibility of developing a transmitter to suit our needs. Since a suitable transmitter was not discovered, specifications were prepared (in coordination with the Operations & Training Division) for transmittal to various contractors.

2. On 8 March 1955, the Office of Logistics was asked to solicit proposals from 11 contractors for a quantity of HF transmitters as described in specifications accompanying the letter of transmittal. These specifications called for a transmitter covering the frequency range 2 to 30 megacycles having a power output in the order of 500 to 1000 watts. The list of manufacturers from whom proposals were to be solicited follows:

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Proposals were received from three of the above manufacturers, namely, [redacted]

On a 25X1A5a1

25X1A5a1 comparative basis was

the [redacted] proposal was roughly twice the cost of

25X1A5a1 the [redacted] proposals, which were rather

close together. Specifically, for a transmitter complete with variable frequency

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oscillator, antenna coupler, and modulator the proposals were (based on a quantity of 100 transmitters):

\$8,979
\$4,993
\$4,750

3. On 1 June 1955, this information was reviewed at the meeting of the Research, Development and Production Review Board. The Engineering Division was directed to study the proposals and exceptions and make a recommendation to the Board along with a study of other transmitters in this class which may now be available. On 10 June 1955, a special meeting of the RD&PR Board was held to discuss the Engineering Division's evaluation of proposals for the new transmitter (designated RT-15). In the discussion the Engineering Division pointed out that the cost of an RT-4 transmitter complete with external VFO, antenna coupler and speech amplifier is \$2,969. The cost of either of the two proposed transmitters (the GE proposals having been ruled out due to excessive cost) is reasonable in comparison when the additional operating and maintenance flexibilities are considered. The Engineering Division's recommendation was that a contract be negotiated with either [REDACTED]

[REDACTED] during the fiscal year 1955 for 150 RT-15 transmitters and 30 RT-15 modulator units, but that further investigation be made of [REDACTED] to determine which of the two proposals was the more satisfactory. This recommendation was approved by the Board with the exception that only 100 transmitters and 20 modulators were to be procured.

4. On 22 June 1955, the Director of Communications asked the Director of Logistics to procure 100 transmitters and 20 modulators from the [REDACTED] inasmuch as the [REDACTED] proposal was the more satisfactory technically in addition to being lowest in overall cost. In the same memorandum it was pointed out that the [REDACTED] and [REDACTED] capability had been thoroughly explored and also that the Signal Corps Laboratory at Ft. Monmouth had been visited to determine whether its newly developed transmitter, the T-368, would fulfill our requirements.

5. A short time later, the Engineering Division learned that the Office of Logistics was negotiating with [REDACTED] and had brought the [REDACTED] quotation down to \$4,333, below that of the [REDACTED] and [REDACTED] further, that the Office of Logistics was in the process of awarding the contract to [REDACTED] despite our statement to the effect that the [REDACTED] proposal was considered more satisfactory technically.

6. On 29 June 1955, the Director of Communications notified the Director of Logistics to terminate negotiations on the RT-15 transmitter procurement. [REDACTED] stated that new proposals for a quantity of 150 transmitters would shortly be forwarded. He stated that the larger procurement may encourage additional qualified contractors to submit proposals with possibly lower cost per unit.

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25X1 7. Since the transmittal of the Communications memorandum asking that procurement of the RT-15 transmitter be suspended, there has been no contact between the Office of Communications and the Office of Logistics on the subject. Actually, activity within the Engineering Division has continued. A new set of specifications has been prepared which clarified a number of points raised in discussions of the previous set of specifications with contractors and making slight revisions in the specifications in accordance with OC-E/OC-O&T discussions. Also, we have been actively monitoring the Signal Corps' T-368 transmitter development and have continued to investigate leads in the industry on other transmitters which may fill our requirements. Further, the [REDACTED] has gone into production on their GPT-750 transmitter and one of these transmitters has been ordered in for evaluation. There are indications that the Air Force may be considering the GPT-750 as a standard item of Air Force equipment; this possibility will be discussed shortly with Colonel Judkins, Chief Air Force Director of Requirements, Communications Branch.

25X1A 8. I am reluctant to enter into a development contract for a transmitter if a suitable military item is available since our logistics and maintenance problems are greatly simplified if we can draw upon the Services for parts and technical assistance. Therefore, I propose that we realistically reassess our requirements for 500 watt transmitters to determine the minimum quantity (if any) of HF-4 transmitters which must be procured to tide us over (a) until the Services adopt or develop a suitable transmitter or (b) until we determine conclusively by internal evaluation whether the GPT-750 will satisfy our needs. It is probable that a memorandum should be prepared for the Office of Logistics advising them of the present status of this ^{preparation} contract; this will be discussed with [REDACTED]. It is also desirable that we take final action, if possible, in advance of the fiscal year deadline to avoid last minute contractual problems and to avoid losing the \$399,000 allocated for the procurement of these transmitters.

[REDACTED]

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